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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,248

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Mark Timothy Bennett

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EXAMINER

NGUYEN, TRI V

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

11/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/645,248	Applicant(s) BENNETT ET AL.	
	Examiner TRI V. NGUYEN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Upon the amendment filed on 07/06/09, Claims 1, 25 and 26 are amended; Claims 9-12 are withdrawn and Claims 27 and 28 are added. The currently pending claims are Claims 1-28.

Applicants' remarks (dual antimicrobial system) and amendments have been carefully considered; however, they are not persuasive and the rejections are maintained - see response to arguments section for details.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "to 100 weight percent of water" in line 7 - what is claimed to be up to this value?

Claim 26 recites the limitation "according to claim 25" in line 2; however, claim 26 seems to recite identical limitations to claim 25.

Claim Rejections - 35 USC § 102 & 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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4. Claims 1-8 and 13-27 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zhou et al. (US 6080387).

Zhou et al. teach an antimicrobial hard surface cleaner. See col.3, ln.8.

Regarding the claimed hard surface treatment composition comprising: an alcohol constituent selected from the group consisting of methanol, ethanol, n- propanol, isopropanol, n- butanol, benzyl alcohol, and mixtures thereof which is present in an amount of from about 40 and 70 weight percent; Zhou et al. teach (col.6) that the alkanol can be selected from methanol, ethanol, n-propanol, "isopropanol," the various positional isomers of butanol, pentanol, and hexanol, and mixtures of the foregoing.

Zhou et al. motivate one of ordinary skill to preferentially utilize ethanol, which advantageously acts as both a solvent, to maintain the ingredients in the liquid composition in dispersion, as well as a disinfectant. If mixtures of solvents are used, the amounts and ratios of such solvents used are important to determine the optimum performances of the inventive composition. It is preferred to have the total amount of solvent to at least 20%, more preferably least 30%, and most preferably, at least 50%, of the composition. A preferred range is about 20-99.9%. These amounts of solvents are generally referred to as dispersion effective or solubilizing effective amounts, since the other components, such as surfactants, are materials which are assisted into solution by the solvents. As in the case of ethanol, the solvent can also have disinfectancy capacity itself. Finally, the solvent is also important as a cleaning material itself, helping to loosen and solubilize certain soils for easy removal from the surface treated. See col.6, ln.15-40.

Regarding the claimed pH adjusting agent such that the pH range of the composition is from about 7.0 to about 13.0; Zhou et al. teach (col.9) the utility of pH buffering agents to maintain a constant pH (which for the invention is between about 5- 14, more preferably

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between about 8-13; formulations containing the tri-potassium and/or tri-ammonium salts will naturally be at a lower end of the range as compared to the corresponding tetra salts). These buffers include, for example, NaOH, KOH, Na.sub.2 CO.sub.3, and K.sub.2 CO.sub.3 as alkaline buffers, and phosphoric, hydrochloric, sulfuric, and citric acids as acidic buffers. See col.9, ln.10-20.

Regarding the optional, one or more constituents selected from the group consisting of antimicrobials, corrosion inhibitors, perfumes, perfume carriers, deodorants, organic solvents, surfactants, propellants, pH buffers, organic acids, fungicides, film-forming polymers, and anti-oxidants; and water, to 100 weight percent, Zhou et al. teach the aerosol formulation comprises an antimicrobial composition that is mixed with a propellant. The composition has the following ingredients: (a) an anionic polymer or prepolymer; (b) a quaternary ammonium compound, the components (a) and (b) combining to form an antimicrobially effective complex; (c) at least one water-soluble or dispersible organic solvent having a vapor pressure of at least 0.001 mm Hg at 25.degree. C., said at least one organic solvent present in a solubilizing--or dispersion--effective amount; (d) an effective amount of a propellant; and (e) the remainder, water. See abstract and col.1 , ln.60-col.2,ln.5.

Regarding the claimed antimicrobial efficacy against one or more of: *Pseudomonas aeruginosa*, *Enterococcus hirae*, *Aspergillus niger*, *T. mentagrophytes*, Hepatitis A, Poliovirus Type 1, Coxsachievirus, Rotavirus, or Rhinovirus: Zhou et al. illustrate by example in col.11-12, the prior art composition comprising Buffer (NaOH) 0.007 Dispersing/emulsifying/wetting agent.sup.1 0.03 Fragrance.sup.2 0.25 Corrosion Inhibitor.sup.3 0.6 Quaternary Ammonium Compound.sup.4 0.63 Anionic Polymer.sup.5 1.05 Propellant.sup.6 10 Water 122.433 Ethanol 65 Total % by weight =100 resulting in complete inactivation of each of the viruses in table II,

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and each of the fungi in table III (which encompass the claimed virucidal activity to Poliovirus Type 1 and antifungal activity to *Aspergillus niger*, and *T. mentagrophytes*).

Regarding the Poliovirus reduction properties of the alcohol, it is noted that the Zhou et al. reference does not explicitly disclose the claimed properties; however, the Zhou et al. reference teaches each of the ingredients within the same proportion and pH ranges; thus the properties of the composition would inherently stem from the ingredients within the composition. Furthermore, it is noted that the court has held that that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir.1990).

It is noted that, according to MPEP 2173.05(i), the “mere absence of a positive recitation is not basis for an exclusion” - thus, the presence of anionic component or film-forming property are not precluded in the instant claims. Furthermore, it is noted that the dual component is not precluded in the instant claims.

Accordingly, the reference anticipates the material limitations of the listed claims.

5. Claims 1-8 and 13-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kitzke et al. (US 3282776).

Kitzke et al. teach a composition that includes (a) at least 10% of water; (b) a propellant; (c) 60 to 65% of ethanol; (d) a quarternary ammonium germicide compound; (d) a surfactant and additives (col 2, lines 38-48; col. 3, lines 4-13; col 5, line 74 to col 6, line 39; col 7, lines 8-65; col 9, lines 19-42 and examples & tables starting on col 12, line 59). Furthermore, Kitzke et al. teach the pH in the range of about 9 to about 11 (col 7, lines 69-71).

Accordingly, the reference anticipates the material limitations of the listed claims.

Regarding the various claimed properties such as the Poliovirus and antimicrobial efficacy, Kitzke et al. do not explicitly teach the claimed efficacy; however, it is noted that the

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court has held that that a material and its properties are inseparable (*In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir.1990)). Thus it would be expected that similar compositions with similar ingredients would exhibit similar chemical behaviors - in the instant case, the same efficacy. Also, it is noted that the reference teaches each of the claimed ingredients within the claimed proportions and pH ranges and such modifications are recognized as being well within the purview of the skilled artisan to yield predictable results.

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuominen et al. (US 4695453) in view of Zhou et al. (US 6080387) or Klitzke (US 3282776).

Tuominen et al. teach a composition that includes between about 40 to 50% by wt of ethanol, about 20-30 % wt of isopropanol, a nominal amount of benzyl alcohol and water (col 2, lines 15-22). It is noted that the amount of thickener is variable depending on the desired thickness (col 3, lines 37-42), thus the absence of a thickener would be an obvious possible formulation for a skilled artisan.

The Tuominen et al. reference discloses the claimed invention but does not explicitly disclose the pH features. The Zhou et al. or Klitzke reference teaches that the basic pH feature is a well-known in hard surface cleaning composition (Zhou et al: col 9, lines 7-14 or Klitzke: col 7, lines 69-71) to gain the benefit of improved performance, stability or aesthetic qualities for the composition. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the basic pH feature in the composition taught by the Tuominen et al. reference.

Regarding the various claimed properties such as the Poliovirus and antimicrobial efficacy, Tuominen et al. and Zhou et al. or Klitzke references do not explicitly teach the claimed efficacy; however, it is noted that the court has held that that a material and its properties are

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inseparable (*In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir.1990)). Thus it would be expected that similar compositions with similar ingredients would exhibit similar chemical behaviors - in the instant case, the same efficacy. Also, it is noted that the reference teaches each of the claimed ingredients within the claimed proportions and pH ranges and such modifications are recognized as being well within the purview of the skilled artisan to yield predictable results.

Response to Arguments

7. Applicant's arguments filed 07/06/09 have been fully considered but they are not persuasive.

Applicants argue that the Zhou et al. reference teach ingredients that are not present in the instant claim - anionic pre-polymer or polymer and the absence of the Poliovirus reduction properties (page 10 et seq.). The examiner respectfully notes that the "comprising" language leaves the claim open for the inclusion of unspecified ingredients even in major amounts, see *Ex parte Davis et al.*, 80 USPQ 448 (PTO Ed. App. 1948). Also, the broad "comprising" and "containing" terminology do not exclude the presence of other ingredients in the composition, unlike the narrow "consisting of" language, see *Swain v. Crittendon*, 332 F.2d 820, 14 USPQ 811 (CCPA 1964). The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004) ("like the term comprising, the terms containing and mixture are open-ended."). *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003). *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) ("Comprising" is a term of art used in claim language

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which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim).

Furthermore, It is noted that, according to MPEP 2173.05(i), the “mere absence of a positive recitation is not basis for an exclusion” - thus, the presence of anionic component is not precluded in the instant claims.

Regarding the absence of the Poliovirus reduction properties, the examiner notes that the court has held that a material and its properties are inseparable (*In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990)). It is noted that the references teach each of the claimed ingredients within the claimed proportions and pH ranges; thus, it is clear that similar compositions with similar ingredients in similar chemical environment would exhibit similar chemical behaviors - in the instant case, the same Poliovirus reduction.

Regarding claim 25, though the “consisting of” language is restrictive of the claimed components, it is noted that the presence of optional components such as an antimicrobial agent is construed as an open-ended parameters that would allow for the anionic pre-polymer to be present as an antimicrobial agent.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRI V. NGUYEN whose telephone number is (571)272-6965. The examiner can normally be reached on M-F 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. V. N./
Examiner, Art Unit 1796
November 17, 2009

/Lorna M Douyon/
Primary Examiner, Art Unit 1796